

CLAIMS

1. A balanced output circuit for outputting a first output signal in accordance with an input signal received from a prestage circuit and a second output signal that is an inverted version of the first output signal, said balanced output circuit comprising:

a comparison voltage generation circuit including a capacitor to generate a comparison voltage in accordance with the charging voltage of said capacitor;

an inverting amplification circuit adapted to receive a voltage associated with said input signal and said comparison voltage, invert and amplify said voltage associated with said input signal, and output the amplified voltage as said second output signal; and

a charging circuit for charging said capacitor in accordance with said first and second output signals so that the DC voltage of said second output signal becomes equal to the DC voltage of said first output signal.

2. The balanced output circuit in accordance with claim 1, wherein said charging circuit has a control amplification circuit for controlling said comparison voltage based on the comparison of said first and second output signals so as to make the DC voltage of said second output signal equal to the DC voltage of said first output signal.

3. The balanced output circuit in accordance with claim 2, wherein
said comparison voltage is the voltage obtained by superposing
the charging voltage of said capacitor on a reference voltage; and
said input signal is the signal obtained by superposing a DC
offset voltage on said reference voltage.

4. The balanced output circuit in accordance with claim 3, wherein said
control amplification circuit has
an amplifier receiving said first and second output signals; and
output supplying switch means for supplying the amplified
output of said amplifier to said capacitor.

5. The balanced output circuit in accordance with claim 4, further
comprising discharging switch means for discharging said capacitor
prior to determining said comparison voltage.

6. The balanced output circuit in accordance with claim 5, adapted to
discharge said capacitor by said discharging switch means at
predetermined regular time intervals or within a predetermined period,
and then re-determine said comparison voltage.

7. The balanced output circuit in accordance with claim 3, wherein said
control amplification circuit is operated only for a predetermined period
for determining said comparison voltage.

8. The balanced output circuit in accordance with claim 7, wherein said control amplification circuit has

an amplifier receiving said first and second output signals; and
output supplying switch means for supplying the amplified output of said amplifier to said capacitor.

9. The balanced output circuit in accordance with claim 8, further comprising discharging switch means for discharging the electric discharge stored in said capacitor prior to determining said comparison voltage.

10. The balanced output circuit in accordance with claim 2, wherein said control amplification circuit is operated only for a predetermined period for determining said comparison voltage.

11. The balanced output circuit in accordance with claim 1, further comprising an input amplification circuit for amplifying said input signal to generate said first output signal.

12. An electronic apparatus, comprising:

a prestage circuit for processing a signal and for outputting a synthesized signal obtained through synthesis of a signal component and a DC voltage that is obtained by superposing an offset voltage on a

reference voltage;

a balanced output circuit in accordance with any one of claims
1-11, adapted to receive the output signal of said prestage circuit; and
a load circuit driven by said balanced output circuit.